

Title (en)

Architecture for power line exchange protocol

Title (de)

Architektur für ein Stromleitungskommunikationsprotokoll

Title (fr)

Architecture pour protocole de commutation à ligne d'alimentation

Publication

**EP 1040360 B1 20090617 (EN)**

Application

**EP 98963955 A 19981215**

Priority

- US 9826690 W 19981215
- US 6947497 P 19971215

Abstract (en)

[origin: WO9931521A1] A scalable networking protocol that allows multiple nodes (103, 104, 110) to communicate via a common data/control channel is described (100). The networking protocol allows any node (103) on the network to assign itself as the active network server. The active network server polls client nodes based on a lineup card (S03). Inactive nodes are automatically removed from the lineup card (S03) thus reducing unnecessary polling traffic. This architecture reduces collisions while preserving bandwidth for actual data transmission. Support for both control and data networking needs is provided by the protocol. Support for streaming data or asynchronous data is provided by allocating time slots on the network and allowing two intelligent nodes (103, 104) to talk directly to each other as arbitrated by the active network server. The active network server can also allocate separate data channels such that large amounts of data traffic can flow independently of the operations of the main network. The network node serving as the active network server can be changed on a dynamic basis, and is typically determined by the first node initiating a transmit request on a sleeping network. Client nodes are addressed by dynamic-polling using an address isolation scheme.

IPC 8 full level

**H04L 12/417** (2006.01); **H04M 11/04** (2006.01); **H04L 12/407** (2006.01); **H04L 12/413** (2006.01)

CPC (source: EP KR US)

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Citation (examination)

- EP 0357992 A2 19900314 - OMRON TATEISI ELECTRONICS CO [JP]
- WILLIAM STALLINGS: "Handbook of computer-communications Standards Volume 2, Second Editions", 17 May 1990, HOWARD W.SAMS & COMPANY, UNITED STATES OF AMERICA, XP000863938

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